

DECLARATION AND POWER OF ATTORNEY

We, Yongming Xia, James E. Thompson, and Jeffrey S. Devine, declare:

We are citizens of the United States of America and residents of the City of Kingwood, County of Harris, State of Texas; the City of The Woodlands, County of Montgomery, State of Texas; and the City of The Woodlands, County of Montgomery, State of Texas.

We verily believe ourselves to be the original, first, and joint inventors of the described and claimed in United States Patent Application Serial No. 10/237,554, filed September 9, 2002.

We have reviewed and understand the contents of the specification, including the claims.

That this application in part discloses and claims subject matter disclosed in our earlier filed pending application, Serial No. 09/966,317, filed September 27, 2001.

That, as to the subject matter of this application which is common to said earlier application, we do not know and do not believe that the same was ever known or used in the United States before our invention thereof, or patented or described in any printed publication in any country before our invention thereof or more than one year prior to said earlier application, or in public use or on sale in the United States more than one year prior to said earlier application.

That said common subject matter has not been patented or made the subject of an inventor's certificate before the date of said earlier application in any country foreign to the United States on an application filed by us or our legal representatives or assigns more than twelve months prior to said earlier application.

That the first filed application for patent or inventor's certificate on said invention set forth in said earlier application filed by us or our legal representatives or assigns in any country foreign to the United States is: filed .

As to the subject matter of this application which is not common to said earlier application, we do not know and do not believe that the same was ever known or used in the United States before our invention thereof; or patented or described in any printed publication in any country before our invention thereof or more than one year prior to the date of this application, or in public use or on sale in the United States more than one year prior to the date of this application.

That said subject matter of this application which is not common to said earlier application has not been patented or made the subject of an inventor's certificate in any country foreign to the United States on an application filed by us or our legal representatives or assigns more than twelve months prior to the date of this application.

That the first filed application for patent or inventor's certificate on said invention first set forth in this application filed by us or our representatives or assigns in any country foreign to the United States is: filed .

We acknowledge our duty to disclose information of which we are aware which is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a) including matters as occurred between the filing date of our said earlier application and the filing date of this application.

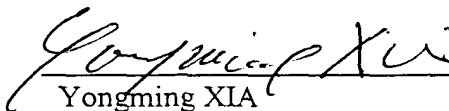
We declare further that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

We hereby appoint William H. Logsdon, Registration No. 22,132; John W. McIlvaine, Registration No. 34,219; Russell D. Orkin, Registration No. 25,363; David C. Hanson, Registration No. 23,024; Richard L. Byrne, Registration No. 28,498; Frederick B. Ziesenheim, Registration No. 19,438; Kent E. Baldauf, Registration No. 25,826; Barbara E. Johnson, Registration No. 31,198; Paul M. Reznick, Registration No. 33,059; Blynn L. Shideler, Registration No. 35,034; Julie W. Meder, Registration No. 36,216; Lester N. Fortney, Registration No. 38,141; Randall A. Notzen, Registration No. 36,882; James G. Porcelli, Registration No. 33,757; Kent E. Baldauf, Jr., Registration No. 36,082; Christian E. Schuster, Registration No. 43,908; Dean E. Geibel, Registration No. 42,570; Thomas Clinton, Registration No. 40,561; Nathan J. Prepelka, Registration No. 43,016; Jessica M. Schroth, Registration No. 47,102; Kirk M. Miles, Registration No. 37,891; Gary F. Matz, Registration No. 45,504; Darrell E. Williams, Registration No. 45,222; and Alka A. Patel, Registration No. 49,092, whose post office address is 700 Koppers Building, 436 Seventh Avenue, Pittsburgh, Pennsylvania 15219-1818, Telephone No. 412-471-8815, our attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, to amend the specification, to appeal in case of rejection, as they may deem advisable, to receive the patent when granted and generally to do all matters and things needful in the premises, as fully and to all intents and purposes as we could do.

All correspondence and telephone calls should be addressed to John W. McIlvaine.

I hereby subscribe my name to the foregoing specification and claims, declaration and power of attorney.

November 3, 2002
Date


Yongming XIA

I hereby subscribe my name to the foregoing specification and claims, declaration and power of attorney.

October 28, 2007 James E Thompson
Date James E. Thompson

I hereby subscribe my name to the foregoing specification and claims, declaration and power of attorney.

November 4, 2002 Jeffrey S. Devine
Date Jeffrey S. Devine



UNITED STATES
PATENT AND
TRADEMARK OFFICE

COPY

APRIL 11, 2003

PTAS

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Under Secretary of Commerce For Intellectual Property and
Director of the United States Patent and Trademark Office
Washington, DC 20231
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UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/09/2002

REEL/FRAME: 013559/0357
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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

XIA, YONGMING

DOC DATE: 11/03/2002

ASSIGNOR:

THOMPSON, JAMES E.

DOC DATE: 10/28/2002

ASSIGNOR:

DEVINE, JEFFREY S.

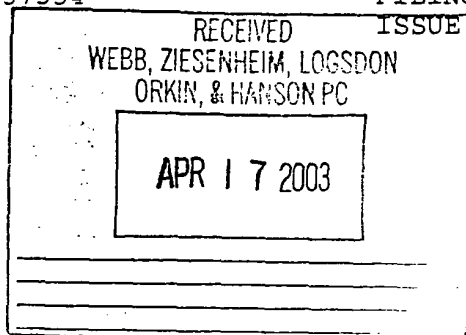
DOC DATE: 11/04/2002

ASSIGNEE:

ASHBROOK CORPORATION
11600 E HARDY
HOUSTON, TEXAS 77093

SERIAL NUMBER: 10237554
PATENT NUMBER:

FILING DATE: 09/09/2002
ISSUE DATE:



013559/0357 PAGE 2

MARY BENTON, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

FORM FTO-1

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U.S. DEPARTMENT OF COMMERCE

EET

Patent and Trademark Office

To the Assistant Commissioner for Patents:
Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Yongming XIA

James E. Thompson

Jeffrey S. Devine

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ OtherExecution Date: November 3, 2002; October 28, 2002; and November 4, 2002,
respectively.

2. Name and address of receiving party(ies)

Name: Ashbrook Corporation

Internal Address:

Street Address: 11600 E HardyCity: HoustonState: Texas ZIP: 77093Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application,
the execution date of the application is:

A. Patent Application No.(s)

Serial No. 10/237,554, filed September 9, 2002

Additional numbers attached? ☐ Yes ☒ No

B. Patent No.(s)

5. Name and address of party to whom correspondence concerning document
should be mailed:Name: John W. McIlvaineInternal Address: Webb Ziesenheim LogsdonOrkin & Hanson, P.C.Street Address: 700 Koppers Building436 Seventh AvenueCity: Pittsburgh State: PA ZIP: 15219-18186. Total number of applications and
patents involved: 17. Total fee (37 CFR 3.41).....\$ 40.00☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number:

(Attach triplicate copy of this page if paying by deposit account)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy
is a true copy of the original document.

Gary F. Matz

Name of Person Signing
Registration No. 45,504

Signature

December 2, 2002

Date

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Total number of pages including cover sheet, attachments and document

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Mail documents to be recorded with required cover sheet information to:
Commissioner for Patents, U.S. Patent and Trademark Office
Office of Public Records, Crystal Gateway 4, Room 335
Washington, D.C. 20231

ASSIGNMENT

WHEREAS, WE, Yongming Xia, James E. Thompson, and Jeffrey S. Devine, residing in the City of Kingwood, County of Harris, State of Texas; the City of The Woodlands, County of Montgomery, State of Texas; and the City of The Woodlands, County of Montgomery, State of Texas, respectively, have invented certain new and useful improvements in "Vertical Filter" for which a patent application was filed in the United States Patent and Trademark Office on September 9, 2002 and bears Serial No. 10/237,554;

AND, WHEREAS, Ashbrook Corporation, a corporation of the State of Texas, having a place of business at 11600 East Hardy, Houston, Texas 77093, hereinafter called the "assignee," is desirous of acquiring the entire right, title, and interest in and to said provisional patent application and the inventions and improvements therein disclosed.

NOW, THEREFORE, for good and valuable consideration paid to us by said assignee, the receipt of which is hereby acknowledged, we do hereby assign, sell, transfer, and set over unto said assignee the entire right, title and interest in and to said provisional application and the inventions and improvements therein disclosed for the United States and all foreign countries and all regular applications claiming the benefit of said provisional application, divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, said assignee to have and to hold the interests herein assigned to the full ends of the terms of said regular applications claiming the benefit of said provisional application and said divisions, reissues, continuations, continuations-in-part, renewals, and/or extensions thereof, respectively, as fully and entirely as the same would have been held and enjoyed by us had this assignment not been made.

We covenant that we are the lawful owners of the said provisional application, and said inventions and improvements therein disclosed, that the same are unencumbered, that no license has been granted to make, use, or sell the said inventions or improvements or any of them, and that we have the full right to make this assignment.


And for the consideration aforesaid, we agree jointly and individually that we will communicate to said assignee or the representatives thereof any facts known to us respecting said inventions and improvements, and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all regular, divisional, reissue, continuation, continuation-in-part, renewal, and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts, deemed necessary or expedient by said assignee or by counsel for said assignee, to assist or enable said assignee to obtain and enforce full benefits from the rights and interests herein assigned.

This assignment shall be binding upon our heirs, executors, administrators, and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said assignee.


Executed November 3, 2002.


Yongming Xia

Executed October 28, 2002.


James E. Thompson

Executed November 4, 2002.


Jeffrey S. Devine